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NOTICE OF ALLOWANCE AND FEE(S) DUE

58467

7590

03/05/2009

MHKKG/SUN
P.O. BOX 398
AUSTIN, TX 78767

EXAMINER

NANO, SARGON N

ART UNIT

PAPER NUMBER

2457

DATE MAILED: 03/05/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,097	01/22/2002	Bernard A. Traversat	5681-07100	9638

TITLE OF INVENTION: RELAY PEERS FOR EXTENDING PEER AVAILABILITY IN A PEER-TO-PEER NETWORKING ENVIRONMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/05/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

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Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/055,097 01/22/2002 Bernard A. Traversat 5681-07100 9638

TITLE OF INVENTION: RELAY PEERS FOR EXTENDING PEER AVAILABILITY IN A PEER-TO-PEER NETWORKING ENVIRONMENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/05/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
NANO, SARGON N	2457	709-238000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB-122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB-47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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58467	7590	03/05/2009	EXAMINER	
NANO, SARGON N				
ART UNIT			PAPER NUMBER	

2457

DATE MAILED: 03/05/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1286 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1286 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.

10/055,097

Examiner

SARGON N. NANO

Applicant(s)

TRAVERSAT ET AL.

Art Unit

2457

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal brief filed on 10/27/2008.
2. ☒ The allowed claim(s) is/are 1 - 4, 6, 8 - 20, 23 - 26, 28 - 32, 35, 37 - 46, 48 - 58, 60 - 62.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINERS AMENDMENT

1. An examiner Amendment to the record appears below. Should the changes and/or additions be unacceptable to the applicant, an amendment may be filed as provided by 37 C.F.R 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.
2. Authorization for this Examiner's Amendment was given in a telephone interview with Mr Robet Cowert on Monday January 12, 2009
3. Please amend claims 1, 6, 8, 20, 23, 24, 28-30, 35, 45, 48-50, 57 and 60-62, and please cancel claims 5, 7, 21, 22, 27, 33, 34, 36, 47 and 59, as indicated below.

1. (Currently amended) A peer computing system, comprising:

a plurality of peer nodes operable to couple to a network, wherein the plurality of peer nodes are configured to implement a peer-to-peer environment on the network according to a peer-to-peer platform comprising one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share content in the peer-to-peer environment, and wherein each of the plurality of peer nodes is a host of content in the peer-to-peer environment;

wherein the plurality of peer nodes are partitioned by a mechanism on the network into a set of one or more peer nodes inside the mechanism and a set of one or more peer nodes outside the mechanism, wherein peer nodes on opposite sides of the mechanism cannot communicate directly with each other on the network;

wherein one of the plurality of peer nodes is a relay peer node operable to couple to the network outside the mechanism, and further operable to:

cache route information describing one or more routes to peer nodes on the network;

receive a message from a peer node outside the mechanism, wherein the message is for a peer node inside the mechanism; [[and]]

relay the message to the peer node inside the mechanism;

receive a query requesting route information to one of the plurality of peer nodes from another one of the plurality of peer nodes, wherein the query is formatted according to an endpoint routing protocol; and

send the requested route information to the requesting peer node in accordance with the endpoint routing protocol.

5. (Canceled)

6. (Currently amended) The peer computing system as recited in claim 1 [[5]], wherein, to relay the message to the peer node inside the mechanism, the relay peer is operable to use the cached route information to route the received message to the peer node inside the mechanism.

7. (Canceled)

8. (Currently amended) The peer computing system as recited in claim 1 [[5]], wherein the route information includes an ordered sequence of peer identifiers configured for use in routing a message to a destination peer node.

20. (Currently amended) A peer node, comprising:

a network interface for coupling to a network;

a memory comprising program instructions, wherein the program instructions are executable within the peer node to, according to one or more peer-to-peer platform protocols:

discover other peer nodes on the network;

communicate with other peer nodes on the network;

cooperate with other peer nodes on the network to form peer groups;

host shared content on the network;

Art Unit: 2457

cache route information describing one or more routes to other peer nodes on the network;

receive a message from a source peer node on the network intended for a destination peer node, wherein the source peer node and the destination peer node cannot communicate directly with each other on the network, wherein the source peer node is on the outside of a partitioning mechanism on the network, and wherein the destination peer node is on the inside of the partitioning mechanism; and

relay the message to the destination peer node, wherein, to relay the message to the destination peer node, the program instructions are further executable to:

locate route information to the destination peer node in the cached route information; and

route the message through the partitioning mechanism to the destination peer node using the located route information.

21. (Canceled)

22. (Canceled)

23. (Currently amended) The peer node as recited in claim 20 [[21]], wherein the cached route information includes ordered sequences of peer identifiers configured for use in routing messages to destination peer nodes.

Art Unit: 2457

24. (Currently amended) The peer computing system as recited in claim 20 [[21]], wherein the relay peer node is further operable to:

receive a query requesting route information to a peer node from another peer node, wherein the query is formatted according to an endpoint routing protocol; and

send the requested route information to the requesting peer node in accordance with the endpoint routing protocol.

27. (Canceled)

28. (Currently amended) The peer node as recited in claim 20 [[27]], wherein the partitioning mechanism is a firewall.

29. (Currently amended) The peer node as recited in claim 20 [[27]], wherein the partitioning mechanism is a Network Address Translation (NAT) gateway.

30. (Currently amended) A peer computing system, comprising:

a plurality of peer nodes operable to couple to a network;

means for the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share content in a peer-to-peer environment on the network;

means for partitioning the plurality of peer nodes on the network into a set of one or more peer nodes inside the partition and a set of one or

Art Unit: 2457

more peer nodes outside the partition, wherein peer nodes on opposite sides of the partition cannot communicate directly with each other on the network;

means for the peer nodes inside the partition to advertise themselves outside the partition; and

means for the peer nodes outside the mechanism to discover the advertised peer nodes inside the partition;

wherein the means for the peer nodes inside the partition to advertise themselves comprises a relay peer node outside the partition, wherein the relay peer node comprises means for publishing advertisements for the peer nodes inside the partition, and wherein the relay peer node is one of the plurality of peer nodes;

wherein the relay peer node comprises means for relaying messages between the peer nodes outside the mechanism and the peer nodes inside the mechanism;

wherein at least one of the messages includes route information, and wherein, to relay the message between the peer nodes, the relay peer further comprises means for using the route information included in the message to route the message to one of the peer nodes inside the mechanism; and

wherein the relay peer node comprises means for caching route information describing one or more routes to peer nodes on the network.

33. (Canceled)

34. (Canceled)

35. (Currently amended) The peer computing system as recited in claim 30 [[34]], wherein, to relay the messages between the peer nodes, the peer computing system further comprises means for using the cached route information to route the messages to the peer nodes inside the mechanism.

36. (Canceled)

45. (Currently amended) A method, comprising:

a plurality of peer nodes implementing a peer-to-peer environment on a network according to a peer-to-peer platform, wherein the peer-to-peer platform comprises one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share content in the peer-to-peer environment, and wherein each of the plurality of peer nodes is a host of content in the peer-to-peer environment;

wherein one or more of the plurality of peer nodes are relay peer nodes;
[[and]]

one of the relay peer nodes caching route information describing one or more routes to other peer nodes on the network, wherein the route information is configured for use in routing messages between peer nodes in the peer-to-peer environment, and wherein the cached

Art Unit: 2457

route information includes ordered sequences of peer identifiers configured for use in routing messages to destination peer nodes;

one of the plurality of peer nodes inside a partitioning mechanism on the network publishing an advertisement on the relay peer node, wherein the relay peer node is outside the partitioning mechanism, and wherein peer nodes inside the partitioning mechanism cannot directly communicate with peer nodes outside the partitioning mechanism;

one of the plurality of peer nodes outside the partitioning mechanism discovering the advertisement to the peer node inside the partitioning mechanism on the relay peer node; and

the peer node outside the partitioning mechanism and the peer node inside the partitioning mechanism exchanging messages through the relay peer node.

47. (Canceled)

48. (Currently amended) The method as recited in claim 45 [[47]], further comprising the relay peer node using the cached route information to route the messages to the destination peer node.

49. (Currently amended) The method as recited in claim 45 [[47]], wherein the partitioning mechanism is a firewall.

50. (Currently amended) The method as recited in claim 45 [[47]], wherein the partitioning mechanism is a Network Address Translation (NAT) gateway.

57. (Currently amended) A computer-readable storage medium storing computer-executable software instructions ~~computer-executable~~ to implement:

a plurality of peer nodes implementing a peer-to-peer environment on a network according to a peer-to-peer platform, wherein the peer-to-peer platform comprises one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share content in the peer-to-peer environment, and wherein each of the plurality of peer nodes is a host of content in the peer-to-peer environment;

one or more of the plurality of peer nodes implementing a relay service in accordance with the peer-to-peer platform to perform as relay peer nodes; [[and]]

one of the relay peer nodes caching route information describing one or more routes to other peer nodes on the network, wherein the route information is configured for use in routing messages between peer nodes in the peer-to-peer environment, and wherein the cached route information includes ordered sequences of peer identifiers configured for use in routing messages to destination peer nodes;

one of the plurality of peer nodes inside a partitioning mechanism on the network publishing an advertisement on the relay peer node, wherein the relay peer node is outside the partitioning mechanism, and wherein peer nodes inside the partitioning mechanism cannot directly communicate with peer nodes outside the partitioning mechanism;

one of the plurality of peer nodes outside the partitioning mechanism discovering the advertisement to the peer node inside the partitioning mechanism on the relay peer node; and

the peer node outside the partitioning mechanism and the peer node inside the partitioning mechanism exchanging messages through the relay peer node.

58. The storage medium as recited in claim 57, wherein the software instructions are further executable to implement:

the relay peer node receiving a query requesting route information to a peer node from another peer node, wherein the query is formatted according to an endpoint routing protocol; and

the relay peer node sending the requested route information to the requesting peer node in accordance with the endpoint routing protocol.

59. (Canceled)

60. (Currently amended) The storage medium as recited in claim 57 [[59]], wherein the software instructions are further executable to implement the relay peer node using the cached route information to route the messages to the destination peer node.

61. (Currently amended) The storage medium as recited in claim 57 [[59]], wherein the partitioning mechanism is a firewall.

Art Unit: 2457

62. (Currently amended) The storage medium as recited in claim 57 [[59]], wherein the partitioning mechanism is a Network Address Translation (NAT) gateway.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sargon Nano whose telephone number is (571) 272-4007. The examiner can normally be reached on Monday - Friday 8:00am-5:00pm .If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sargon N Nano/

Examiner, Art Unit 2457

/Salad Abdullahi/

Primary Examiner, Art Unit 2457